EPA Region 9 Desk Statement
Concerning the Report from the California Council on Science and Technology Entitled
"An Independent Scientific Assessment of Well Stimulation in California"
Dated July 2015

Desk Statement Summary

On July 9, 2015, the California Council on Science and Technology released a report entitled "An Independent Scientific Assessment of Well Stimulation in California." This report was prepared in response to California Senate Bill 4 passed in 2013 to assess the framework for the regulation of hydraulic fracturing and acid stimulation technologies used by the oil and gas industry in California.

While the report focuses primarily on onshore oil and gas operations, it also addresses offshore operations under the jurisdiction of EPA Region 9. Discharges from offshore oil and gas platforms are regulated by Region 9's general NPDES permit No. CAG280000 (available at: http://www.epa.gov/region9/water/npdes/permits.html#watersca). As discussed below, we believe the report contains a number of inaccuracies concerning Region 9's general permit.

1) Executive Summary (Conclusion 1.5) – the report indicates that requirements for offshore operations do not meet the standards of SB4, and do not allow an assessment of the level of activity or composition of hydraulic fracturing chemicals discharged to the ocean.

EPA Response: The Region 9 general permit authorizes and regulates the discharge of well treatment fluids (defined in Part 5 of the permit), which include acidizing and hydraulic fracturing fluids. For ocean discharges of these fluids, the general permit requires the submittal of information concerning the volume of discharge, number of operations and specific chemicals used to formulate the fluids. These information requirements are comparable to those in SB4 regulations. Although the permit does not distinguish between acidizing and hydraulic fracturing fluids, requiring information for well treatment fluids (which include both acidizing and hydraulic fracturing fluids) will ensure that adequate information is available to evaluate the potential environmental effects of the discharges.

2) Executive Summary (Recommendation 1.2) – the report recommends that EPA conduct an assessment of ocean discharges of well stimulation fluids and whether alternatives to discharge are available.

EPA Response: EPA intends to review the information submitted in accordance with the requirements of the general permit (and any other new information that becomes available) to conduct the type of assessment recommended by the report. Region 9 also intends to work with other agencies such as the California Coastal Commission, the Department of the Interior (Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement) and any other interested parties in evaluating and appropriately responding to new information received. The general permit includes a reopener clause that allows the permit to be modified to

include additional discharge limitations if new information indicates the discharges may cause unreasonable degradation of the marine environment.

Well treatment fluids are normally discharged with produced water at California offshore platforms. For produced water, studies of alternatives to discharge have already been conducted and considered in the development of permit requirements. However, the requirements could be revised if new information indicates alternatives to discharge may be feasible.

3) Volume III, (Offshore Case Study, Section 2.6.1.2). The report indicates that the general permit does not specifically address acidizing and that hydraulic fracturing is only mentioned in relation to produced sand. Further, the report indicates the permit does not account for the potential effects on the marine environment.

EPA Response: As noted above, the general permit authorizes and regulates the discharge of well treatment fluids, which include both acidizing and hydraulic fracturing fluids. Additional information concerning these fluids can be found in EPA's Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (EPA 821-R-93-003)

Although the permit itself may not include the words "acidizing" or "hydraulic fracturing" they are both addressed under the category of well treatment fluids. As noted previously, for discharges of well treatment fluids, the general permit requires the submittal of volume and composition data for the fluids. This information will allow an assessment of the potential effects of the discharges, and Region 9 intends to work with other agencies and interested parties in evaluating new information.

In addition, the general permit may be reopened and modified as appropriate if new information indicates a discharge may cause unreasonable degradation of the marine. Overall, Region 9 believes that requirements of the general permit are protection of the marine environment.

4) Volume III, (Offshore Case Study, Section 2.8). The report recommends that whole effluent toxicity (WET) tests for produced water be conducted in conjunction with well stimulation operations to measure the potential toxic effects of well stimulation chemicals that are discharged with produced water.

EPA Response: Such a requirement may be considered for the future. For now, Region 9 believes that an adequate assessment of the potential effects of the combined discharge of produced water and well treatment fluids can be made based on the composition and volume data to be submitted.

Communication Strategy

- Have desk statement ready in R9 public affairs offices to respond to any inquiries that may be received.

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